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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/084,704	02/26/2002	Gabor Devenyi	01W120	6376

7590 09/08/2005

Raytheon Company
Bldg. EO/E01/E150
2000 East El Segundo Boulevard
P.O. Box 902
El Segundo, CA 90245

EXAMINER

HANSEN, COLBY M

ART UNIT	PAPER NUMBER
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3682

DATE MAILED: 09/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

10/084,704

Applicant(s)

DEVENYI, GABOR

Examiner

Colby Hansen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 and 17-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 and 17-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

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Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

In view of the arguments filed on 4/11/2005, PROSECUTION IS HEREBY REOPENED. A new rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 21 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 21 recites the limitation "the linear slide" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, 5, 8-9, and 18-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Schwanz et al (US Pat. 4,227,426).

Schwanz et al (US Pat. 4,227,426) discloses a leadscrew assembly comprising:

A leadscrew 1 comprising:

a cylindrical elongated shaft having an outer lateral surface and a rotational axis, and

a leadscrew thread 3;

a hollow drive nut housing 6 comprising;

a nut bore having an unthreaded inner surface with the leadscrew being inserted through the nut bore, the nut bore being sized such that the leadscrew may rotate therein about the rotational axis, and

a spring pin 7 affixed to the drive nut housing and spanning across the nut bore to engage the leadscrew thread;

the spring pin 7 has a first end, a central portion, and a second end, and wherein the first end and the second end are each affixed to the drive nut housing (at the end of slots 10);

the first spring pin retainer and the second spring pin retainer each comprise openings in the drive nut housing (at the end of slots 10);

a motor 5 that rotationally drives the leadscrew (by way of the nut).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 6 & 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schwanz et al (US Pat. 4,227,426).

Schwanz et al (US Pat. 4,227,426) discloses the claimed invention except for the spring pin 7 arcing over the leadscrew. Since it has not been disclosed why such a feature is mechanically pertinent, it is considered to be a matter of obvious design choice and would have been obvious to one having ordinary skill in the art at the time the invention was made to have made Schwanz et al (US Pat. 4,227,426) to be in arcing engagement with the leadscrew so as to increase surface area contact, thereby allowing for greater force transfer through the engagement.

Claims 2 & 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schwanz et al (US Pat. 4,227,426) in view of Devenyi (US Pat. 5,636,549).

Schwanz et al (US Pat. 4,227,426) discloses the claimed invention except it does not disclose the leadscrew comprising circular thread wire helically wrapped in spaced-apart turns with a spacer wire upon the lateral surface and affixed to the elongated shaft.

Devenyi (US Pat. 5,636,549) discloses a leadscrew comprising an elongated shaft having an outer lateral surface and a rotational axis, and a leadscrew thread comprising a thread wire helically wrapped in spaced-apart turns upon the lateral surface and affixed to the elongated

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shaft; a spacer wire having a size smaller than that of the thread wire and helically interwrapped about the elongated shaft with the thread wire; a thread wire that has a circular cross section.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized the helical wire thread of Devenyi (US Pat. 5,636,549) within Schwanz et al (US Pat. 4,227,426) so as to form a hard, smooth thread comprising a wear-resistant running surface for engagement with a bearing nut member as suggested by Devenyi (US Pat. 5,636,549).

Claims 9-15, 17 and 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pan (US Pat. 6,459,844) in view of Schwanz et al (US Pat. 4,227,426), and further in view of Devenyi (US Pat. 5,636,549).

Pan (US Pat. 6,459,844) discloses an optical filter supported on a linear slide apparatus utilizing a motor that rotationally drives a screw and linearly translating a nut.

However Pan (US Pat. 6,459,844) does not disclose the use of a hollow nut with spring pin for engaging a screw assembly or the use of helically wrapped wire with smaller spacer wire.

Schwanz et al (US Pat. 4,227,426) discloses a leadscrew assembly comprising:

A leadscrew 1 comprising:

a cylindrical elongated shaft having an outer lateral surface and a rotational axis, and

a leadscrew thread 3;

a hollow drive nut housing 6 comprising;

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a nut bore having an unthreaded inner surface with the leadscrew being inserted through the nut bore, the nut bore being sized such that the leadscrew may rotate therein about the rotational axis, and

a spring pin 7 affixed to the drive nut housing and spanning across the nut bore to engage the leadscrew thread;

the spring pin 7 has a first end, a central portion, and a second end, and wherein the first end and the second end are each affixed to the drive nut housing (at the end of slots 10);

the first spring pin retainer and the second spring pin retainer each comprise openings in the drive nut housing (at the end of slots 10);

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized the specific relationship between the screw and nut of Schwanz et al (US Pat. 4,227,426) within the screw/nut actuated optical filter mechanism of Pan so as to have a relatively inexpensive arrangement for transferring forces between the nut and screw shaft, as suggested by Schwanz et al (US Pat. 4,227,426).

Devenyi (US Pat. 5,636,549) discloses a leadscrew comprising an elongated shaft having an outer lateral surface and a rotational axis, and a leadscrew thread comprising a thread wire helically wrapped in spaced-apart turns upon the lateral surface and affixed to the elongated shaft; a spacer wire having a size smaller than that of the thread wire and helically interwrapped about the elongated shaft with the thread wire; a thread wire that has a circular cross section.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized the helical wire thread of Devenyi (US Pat. 5,636,549) within Pan (US Pat. 6,459,844) so as to form a hard, smooth thread comprising a wear-resistant

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running surface for engagement with a bearing nut member as suggested by Devenyi (US Pat. 5,636,549).

FACSIMILE TRANSMISSION

Submission of your response by facsimile transmission is encouraged. Group 3600's facsimile number is **(571) 273-8300**. Recognizing the fact that reducing cycle time in the processing and examination of patent applications will effectively increase a patent's term, it is to your benefit to submit responses by facsimile transmission whenever permissible. Such submission will place the response directly in our examining group's hands and will eliminate Post Office processing and delivery time as well as the PTO's mail room processing and delivery time. For a complete list of correspondence not permitted by facsimile transmission, see MEP. 502.01. In general, most responses and/or amendments not requiring a fee, as well as those requiring a fee but charging such fee to a deposit account, can be submitted by facsimile transmission. Responses requiring a fee which applicant is paying by check **should not be** submitting by facsimile transmission separately from the check.

Responses submitted by facsimile transmission should include a Certificate of Transmission (MEP. 512). The following is an example of the format the certification might take:

I hereby certify that this correspondence is being facsimile transmitted to the Patent and Trademark Office (Fax No. (703) 872-9306) on _____

(Date)

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Typed or printed name of person signing this certificate:

(Signature)

If your response is submitted by facsimile transmission, you are hereby reminded that the original should be retained as evidence of authenticity (37 CFR 1.4 and MEP. 502.02). Please do not separately mail the original or another copy unless required by the Patent and Trademark Office. Submission of the original response or a follow-up copy of the response after your response has been transmitted by facsimile will only cause further unnecessary delays in the processing of your application; duplicate responses where fees are charged to a deposit account may result in those fees being charged twice.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Colby Hansen whose telephone number is (571) 272-7105. The examiner can normally be reached on Monday through Thursday and every other Friday from 7:30 PM to 5:00 PM (EST).


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chuck Marmor, can be reached on (571) 272-7095. Any inquiry of a general nature

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or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-2168.

Colby M. Hansen


Patent Examiner 9/6/05


WILLIAM C. JOYCE
PRIMARY EXAMINER 9/6/05